Objectives:

- Develop an accounting mechanism to be used to test prospective transfers and to verify actual transfers.
- Assess the need for additional measures beyond Water Code Section 1707 to protect water transferred to instream flow.
- Develop an agreed upon level of precision to provide assurance to the necessary parties that the transferred quantity was delivered.
- Determine needed communication lines between transferring party and tracking entity to ensure a smooth flow of information.
- Included an adaptive process that allows for periodic refinements in accounting mechanisms and communication lines, if necessary, as experience dictates.

Specific aspects of this issue have been considered by the CALFED agencies, working through the Transfer Agencies Group. In particular, consideration has been given to which parties and/or agencies should be responsible for tracking instream transfers. Following is a summary of the questions and recommendations currently being discussed by CALFED agencies. During Stage 1, focused meetings with stakeholders will add to the inter-agency discussions.

Proponents of instream water transfers want to be sure that the water they acquire and transfer reaches its intended destination. This requires a responsible party to track the transfers and a mechanism to track flows and protect transferred water from illegal diversion. It is assumed that the parties wishing to transfer the water have valid rights to the water, so no other junior or senior water right holder can claim the water and that other provisions of Water Code Section 1707 are followed.

A traditional water transfer (for diversion and consumptive use) is usually accounted for by measuring equipment located at both the point of origin and the new place of use (destination). For in-stream transfers, with the existing network of gaging stations and measuring points and availability of portable meters, measuring and tracking in-stream water transfers in the Sacramento/San Joaquin valleys or the Bay/Delta is in concept much the same. However, water transfer proponents should be aware of certain limitations in the capability, accuracy and precision of the water measuring system. In order to track a single transfer, there may be several water agencies involved, each having measurement facilities of differing degrees of accuracy.

For example, a water transfer may have its source in a small northern California stream or reservoir which is equipped with metering equipment that is able to measure quantities below 100 cfs within accuracies of 1 to 2 percent. If the destination or new place-of-use for the water is in the Delta, gaging stations on the lower Sacramento River may record flows in the magnitude of 6,000 to 60,000 cfs with accuracies ranging from 200 to 2,000 cfs.

There are other limitations on the system. Along the path of a proposed water transfer, there may be hundreds of intermediate diverters. These may have to be monitored in the tracking and reporting process to protect the transferred water from illegal diverters.

Many transfer proponents are concerned that, given these limitations, their in-stream transfers will be lost or unprotected. They think there should be a strict policing or monitoring system that tracks all diversions on a real time basis to ensure that in-stream water is not illegally diverted. At present, no such system exists. The existing system relies on voluntary compliance and respect for others' water rights. When an illegal diversion or violation does

occur, the State Water Resources Control Board or the courts can be called on to settle disputes and enforce rights. If a violator is caught and harm can be proved, an illegal diverter can be liable to pay back water and damages to water users who have harmed. These remedies may not always be adequate for short-term transfer proponents because an illegal diversion could ruin an entire project and there would not be enough time or resources to recover water and damages from illegal diverters.

Many short-term transfer proponents feel "their" transfer water should be separately accounted for, at a higher priority and with a guarantee that it will not be lost in the system. Their rationale is that the long-term water rights holders must deal with these losses and problems on a daily basis and that short-term transfer water is just riding on top of all the other water in the system. They feel that if water is illegally diverted it is somebody else's water since the illegal diversion would have probably occurred whether or not the in-stream transfer water took place. Long-term water rights users feel transfer proponents should share proportionately in the system losses. The long-term water right holders do not want to be burdened with tracking another diversion in the system, but usually end up with this task primarily to protect their existing rights and ensure that the in-stream transfer does not impact their supplies.

The agencies believe that the process to track in-stream flows should be very similar to tracking traditional water transfers. For traditional water transfers the most likely parties to track the water or be involved in the collection of information would be: first - those acquiring the water and those releasing the water; next - others in the system that would be effected by the transfer, such as downstream water users or agencies utilized by the proponents to transport or convey the water; finally - regulating or governing agencies may be asked to monitor and protect the water through their enforcement authority. This hierarchy should also apply to in-stream water transfers. A major difference is that the party acquiring the water for in-stream use usually will not own any metering or tracking facilities at the new place of use. Thus, the acquiring party will almost always need the assistance of another entity in one of the later two groups.

CALFED agency staff are recommending that the water transfer proponent be responsible for developing a tracking system or identify an existing mechanism to be used to track the flows and be willing to collect or pay for the collection of information needed to account for the water. As part of this tracking system, water project operators within the affected waterways would be advised of the timing and magnitude of the in- stream flows on a real time basis. This allows project operators to adjust operations accordingly.

Additional discussion among CALFED agency staff and stakeholders regarding tracking and accounting for instream flows is needed. Once these tracking and accounting measures are agreed upon, consideration will be given to whether additional analysis of instream transfers is necessary and whether additional legislation related to instream transfers would be useful. Finally, these discussions should consider and clarify the circumstances under which water transferred for in-stream use may be subsequently diverted for other purposes.

4.4.4 ADDITIONAL WATER RIGHTS PROTECTION LEGISLATION

Addresses: Section 3.3.3
Recommendation Type: Process

In October of 1999, Governor Davis signed legislation (SB 970, Costa) that includes additional legal protections for water rights holders who enter into temporary water transfer agreements, for consumptive or environmental (instream) uses. CALFED believes that this legislation, in addition to statutes already in the California Water Code, adequately responds to the need for additional water rights protection legislation. Therefore, CALFED does not at this time intend to pursue this matter further during Stage 1 of Program implementation.

4.4.5 LOCAL ASSISTANCE FOR GROUNDWATER MANAGEMENT

Addresses: Section 3.3.2
Recommendation Type: Action

As part of the Water Management Strategy (described in the *Phase II Report*), a groundwater assistance program will be established to fund studies to gather groundwater data and to enable local entities to develop and implement groundwater management/monitoring programs. The data generated by these studies will be used to evaluate an area's potential for implementing conjunctive use projects designed to help meet CALFED objectives. The groundwater management programs will ensure that conjunctive use projects will protect the local groundwater resources and groundwater rights.

The primary objectives of this action are to: 1) provide support to local programs for the evaluation of groundwater quality and quantity through real-time monitoring and modeling, 2) provide support to local entities for development of local groundwater management programs, and 3) identify potential impacts of conjunctive use operations on local groundwater basins so that appropriate mitigation measures can be developed.

This assistance program is described here as part of the Water Transfer Program, but it is actually a part of the broader water management strategy. More details of the administration and governance of the program, including a proposed method to distribute funds, is described as part of the conjunctive use activities in the *Implementation Plan,* an appendix to the Programmatic EIR/EIS.

4.5 TECHNICAL, OPERATIONAL, AND ADMINISTRATIVE RULES

Much of the focus over the past two years has been on resolving resource protection issues. Limited discussions on the technical issues have occurred in the BDAC Water Transfer Work Group and the Transfer Agency Group. As a result, the potential solution options listed in Section 3.4 need to be discussed in more detail in order to develop recommendations,

whether they be actions, policies adopted by a CALFED agency, or establishment of processes to work through these very complex and controversial issues. The information presented below represents the consensus reached to date on the technically oriented issues which will be discussed during the next several months after the completion of the Programmatic EIS/EIR.

In general, these actions address a fundamental need to reduce the transaction costs associated with proposing and successfully completing responsible water transfers. CALFED proposes to develop streamlined transfer approval procedures for certain kinds of transactions (intra-regional transfers, short-term transfers, dry-year transfers). This streamlining would include "pre-certification" of certain classes of transfers and expedited environmental review procedures. In some instances, legislation may need to be developed to ensure clarification and streamlining occur. CALFED will support the development of such legislation as necessary.

4.5.1 SOLUTION PROCESS TO RESOLVE TRANSFERRABLE WATER DEFINITIONS

Addresses: Section 3.4.1 and 3.4.2
Recommendation Type: Process

The Guidebook discussed in Section 4.5.4 explains current laws and statutes governing water transfers and describes the agencies' current policies and procedures regarding definition and quantification of transferrable water. It also identifies the areas of technical agreement on issues related to transferrable and saved or conserved water. For those issues where technical agreement cannot be reached and/or where changes in policy may be required, a technical team or working group of stakeholders, CALFED agency representatives, and objective experts will be convened and facilitated by CALFED. This is proposed to occur during Stage 1 implementation. (Inability in the short-term to achieve consensus does not preclude a transfer proposal from moving forward, especially for transfer types where agreement exists. In the interim, disagreements over transferability will continue to be resolve as they are now, on a case-by-case basis.)

This CALFED facilitated process will allow the agencies and the stakeholders to present their positions and views on a particular technical issue related to transferrable water. If the issue cannot be resolved directly, the participants may take the question to a facilitated process for further discussion. One possible outcome may be a recommendation that, during Stage 1, the SWRCB adopt water rights orders or formal rules for the definition of transferable water.

This technical process will identify the range of water transfer proposal scenarios with different definitions of transferrable water. Variations in the interpretation of transferrable water may be based on differences in time or location (for example, 1-year transfers versus multi-year and in-basin versus out-of-basin transfers). The technical team will report its findings to CALFED, which will facilitate further discussion among CALFED agencies. Discussions then will focus on possible policy changes needed to clarify how transferrable water is be defined under each scenario.

Clarifications in definitions of transferability will be publicly disclosed through the interactive web-site, discussed in Section 4.2 (see Figure 4-2) and in the Guidebook. Results

of these efforts are also integral to streamlining the water transfer approval process discussed in Section 4.5.4.

4.5.2 CLARIFICATION OF CARRIAGE WATER REQUIREMENTS

Addresses: Section 3.4.3
Recommendation Type: Process

There are two specific questions to be addressed regarding carriage water. First: when is a carriage water requirement properly imposed on a cross-Delta water transfer? Second: when carriage water is required, what is the best method for calculating or quantifying the amount of carriage water? The answers to these questions will focus on ensuring that the transport of water across the Delta will not cause adverse impacts, primarily manifested as a degradation in water quality, to other legal users of water, including the CVP and SWP, or adverse impact to environmental conditions.

Standardization of this requirement is necessary so that proponents can adequately evaluate and include the effects of carriage water requirements while they are still negotiating their transfer arrangement. This will allow for better understanding of risk potential and assignments of responsibility.

During 2000, CALFED will facilitate a technical review using CALFED agencies and key stakeholders to discuss these questions. This technical team approach will develop criteria for applying carriage water requirements to cross-Delta water transfers and will develop methodologies for quantifying carriage water when it is required. For example, it is possible that when there is excess Delta outflow, a cross-Delta transfer may be able to be implemented without carriage water (though, during these conditions, the state and federal water projects normally operate at full capacity; see Section 4.6). During other hydrologic conditions, however, carriage water could be a necessity. With CALFED facilitation, technical experts from the stakeholder community and from CALFED agencies will develop a set of recommendations on carriage water issues for CALFED agencies to consider.

The technical team will consist of experts already engaged on this issue in the Bay-Delta Modeling Forum (an organization established to resolve state/federal/stakeholder modeling issues). Additional participants, such as USBR, the SWRCB and other interested parties or experts, may also be included. During 2000, a Bay-Delta Modeling Forum workshop will be held to discuss methods and models and propose recommendations on carriage water requirements.

Recommendations from the technical team will be presented to the CALFED Transfer Agency Group (TAG - a group of CALFED agency representatives that have been working on CALFED transfer issues; see page 1-2). Given the close relationship between carriage water requirements and CVP/SWP operations criteria for Delta export pumping, these recommendations may also be presented to the CALFED Operations Group (Ops Group) at the appropriate time. After consideration by TAG and the Ops Group, the recommendations will be forwarded to the CALFED Policy Group for final approval.

4.5.3 RESOLUTION OF DWR/USBR RESERVOIR REFILL REQUIREMENTS

Addresses: Section 3.4.4
Recommendation Type: Process

[This is a subset of the application of the "no-injury" rule (see Section 3.4.1) and is included here solely as it relates to DWR and USBR water rights[1].]

As with carriage water, there are two issues related to reservoir refill criteria that need resolution: 1) to determine the applicability of refill criteria, by which is meant describing when and what conditions must exist for refill criteria to be applied to a stored water transfer; and 2) to define the methods of calculating refill quantities, by which is meant describing the methodology used to determine a specific quantity of water which would have to be bypassed in the year(s) subsequent to the stored water transfer. The answers to these questions will focus on ensuring that the transfer of water from a storage facility will not cause adverse impacts to other legal users of water, especially the CVP and SWP.

Similar to carriage water requirements, standardizing refill requirements will allow proponents to adequately evaluate and include the effects of reservoir refill requirements while they are still negotiating their stored water transfer arrangement. This will allow for better understanding of risk potential and assignments of responsibility for mitigating any affects to CVP or SWP water supplies.

During the last several months, CALFED staff, working with CALFED agency representatives, developed the vision statement and objectives presented below. These will guide future stakeholder/agency discussions regarding answers to the questions posed above.

Vision: Develop implementable criteria that protect other legal users of water from injury as a result of refill of a reservoir after the transfer of stored water.

Objectives:

- Articulate a basis for why refill criteria are necessary.
- Develop criteria that are consistent and understandable by transfer proponents.
- Define when refill criteria are applicable verus when it is not.
- Define how the quantity of refill is calculated.
- Focus on minimizing impacts to CVP and SWP water operations

A proposal responsive to the first issue dealing with the difference in application of refill criteria for in-basin and out-of-basin transfers, was developed and presented by SWRCB staff in the July 1999 Water Transfer Guidebook at pages 6-8 – 6-10. Currently, CALFED agencies are considering this proposal. The current version of this proposal is presented in Attachment C to this document.

[1]There are other users of water that can be affected by stored water transfers besides the SWP and CVP, thought this discussion is limited to impacts solely to their water rights. In some cases downstream appropriators might be injured by a transfer of this kind. If they are affected, these affects should be mitigated to non-injury or the transfer would not be approved, as required under various sections of the California Water Code.

Once the agencies are in agreement, this proposal will be discussed with representatives from various stakeholder groups.

The second issue, describing standard methodology, is being discussed by the Transfer Agency Group (TAG - a group of CALFED agency representatives that have been working on CALFED transfer issues, see page 1-2). Facilitated stakeholder meetings on a recommended methodology will be held early during Stage 1 implementation. When consensus is reached, this will become the standard method used by approving agencies to calculate refill requirements as a condition of a water transfer.

4.5.4 STREAMLINED APPROVAL PROCESS FOR ALL TRANSFERS

Addresses: Section 3.4.5
Recommendation Type: Action

Some streamlining of the water transfer approval process should result from resolving other water transfer issues as described in this Section. However, even with such improvements, there is room for further progress. One of the solution options in Section 3.4 is development of a standardized guidebook. As of July 1999, the SWRCB issued *A Guide to Water Transfers* in draft form. This document includes a description of the procedures to be followed and detailed information regarding the jurisdictional requirements for approving a specific transfer proposal (i.e., who has the authority to approve, disapprove or condition a proposed transfer). Information regarding an agency's approval criteria, such as how the amount of water deemed transferrable is likely to be determined, is also provided (see the associated recommendation in Section 4.5.1). The current draft of this guidebook can be retrieved from the SWRCB web-site at *www.waterrights.ca.gov*.

CALFED intends to take the guidebook concept to the next level by creating an interactive, online tool that will guide transfer proponents through a series of questions which will return relevant information about application requirements specific to each proposed transfer. Detailed information regarding jurisdictional requirements and review criteria will also be provided based on how questions are answered. The intent of this tool is to ensure that all pertinent details are provided for a proposed transfer that must undergo review by DWR, USBR, or SWRCB. Case-specific feedback will be provided based on information from the applicant regarding, but not limited to the:

- transaction participants (buyer, seller, intermediary);
- underlying water right;
- method proposed to make the water available to transfer;
- destination of the water proposed for transfer; and,
- duration of the transfer.

In addition to CEQA or NEPA compliance, and depending on the type of transfer (land fallowing, storage release, groundwater pumping, etc.), additional specific analysis concerning potential impacts on various conditions would be requested, pursuant to the policy requirement under Section 4.4.2.

One desired outcome of this effort is development of a unified set of rules, guidelines and procedures used by the agencies. This information will be fully integrated into the web-site

(see Section 4.2) which will also provide direct access to application forms, agency review criteria, data sources, and broadly accepted analysis tools. All of this is intended to make the application and review/approval processes as quick and seamless as possible.

Prior to the Record of Decision and during the initial years of Stage 1, CALFED staff will continue to work with DWR, USBR, and the SWRCB on the development of a fully integrated web-site. The web-site will be designed such that information will be continually updated as transfer policies, rules and procedures change. It will become the primary tool to assist proponents wanting to transfer water (see Section 4.2 and Section 5.1 for more information on the planned web-site).

4.5.5 EXPEDITED APPROVAL PROCESS FOR SOME TRANSFERS

Addresses: Section 3.4.5
Recommendation Type: Process

Certain types of water transfer proposals can already be expedited through the State Water Resources Control Board approval process. These are described in the draft "Guide to Water Transfers" circulated by the State Board staff in July 1999. Additionally, SB 970, effective January 1, 2000, makes some changes in the State Board's approval process for certain types of transfers. For example, water code sections 1726 and 1727 have been repealed and replaced with a new section 1726 which shortens the amount of time allowed to the Board for evaluation of temporary transfers submitted under water code section 1725.

During Stage 1 of Program implementation, additional mechanisms for expedited approvals of certain types of transfers will be discussed and evaluated by the CALFED agencies, including the State Board, in consultation with stakeholders. For example, in-basin transfers, transfers that have been previously approved and implemented without adverse impacts, instream flow transfers, and transfers within the CVP or SWP export service areas are the types of transfers which might be suitable for further modification and streamlining in the approval process. Some of the questions which will be considered are the level of environmental documentation needed for such transfers, the extent of public review and comment, protest opportunities and allocation of burden of proof. One example of this is the model used by the USBR for transfers within particular CVP units (e.g., transfers among contractors within the San Luis Unit). To expedite these transfers, USBR produces "umbrella" environmental assessments on a regional or unit-by-unit basis. These assessments usually cover a period of 3 to 5 years, at which time new assessments must be made. Proponents meeting the conditions described in the environmental documentation can gain approval for their transfer in less than one week and generally in one day. Transfers not covered under the regional environmental documents must comply with the standard USBR application requirements.

Because the Water Transfer Program is designed to ensure protection against significant adverse third-party impacts, expedited transfer approvals will not be proposed where the transfer requires a more extensive review and comment period or more extensive technical evaluation. Expedited approval is currently applicable only to short term transfers and CALFED does not propose to change that rule.

4.6 WHEELING AND ACCESS TO FEDERAL AND STATE CONVEYANCE FACILITIES

Because the focus of the CALFED Water Transfer Program thus far has been on resolving resource protection issues, discussions of the "wheeling and access" issues has been limited. However, some possible actions have been identified. Access to conveyance capacity in a new facility has not been discussed because the Preferred Program Alternative (see the *Phase II Report*) does not contain an isolated facility.

4.6.1 FORECASTING AND DISCLOSURE OF AVAILABLE CAPACITY IN EXISTING PROJECT FACILITIES

Addresses: Section 3.5.1
Recommendation Type: Action

With assistance from other CALFED agencies, DWR and Reclamation staff will improve forecasting tools and more widely disclose forecasts of potential pumping and conveyance capacity in project facilities, including limiting factors and risks. The intent is to provide transfer proponents with forecasts regarding the potential availability of conveyance capacity for cross-Delta water transfers and the probabilities of its availability. Forecasts also could be provided for other portions of project conveyance facilities, as needed. Forecasts would occur on a monthly basis (in conjunction with water supply forecasts) and would be based on the best information available to project operators.

A forecast will not guarantee that the capacity will be available because of the variability of operating criteria. These include but are not limited to: hydrologic conditions, ESA requirements, Delta water quality standards, discretionary actions, and physical capacity limitations. Forecasts will be developed in conjunction with, or as part of, the deliberations of the CALFED Ops Group (a forum for inter-agency discussion and decision making regarding state and federal water project operations), and will probably be disclosed through or in conjunction with the web-site (see Section 4.2).

4.6.2 EVALUATE POLICIES FOR TRANSPORTING WATER IN EXISTING PROJECT FACILITIES

Addresses: Section 3.5.1
Recommendation Type: Process

During 2000, CALFED will facilitate a process to review and consider modifications to existing policies and procedures for the use of available conveyance capacity in the SWP and CVP project facilities. Such policies and procedures include setting priorities for use of available capacity, how to process requests, and how to estimate the capacity available for transporting water transfers.

CALFED will work with DWR, USBR and stakeholders to identify ways to increase the availability and predictability of conveyance capacity for transferred water in state/federal facilities. These discussions will also consider the proposed operations of the Environmental Water Account (EWA - see *Revised Phase II Report*, an appendix to the Programmatic EIS/EIR). CALFED will initiate discussions with the agencies to develop a set of options and assessments of each option. Then, the discussion will be expanded to include stakeholder interests. Recommended policy changes will be brought to the CALFED Policy Group for concurrence. CALFED will also assist in efforts to develop legislation that may be necessary to ensure implementation of agreed upon solutions.

The storage and conveyance components of the CALFED Program include several actions which may increase the quantity or reliability of water exported from the Delta in existing project facilities (e.g., improved fish screens, in-Delta flow barriers, increase in the permitted pumping capacity). If additional Delta export capacity is developed as part of such actions, the issue of who benefits from the increase will need to be discussed. This is especially relevant to the proposed operations of the EWA. One option is to give priority for a percentage of the incremental increase to water users or water market interests for conveyance of non-project transfers. Consideration will be given to whether such a policy could be implemented in a way that is consistent with CVP and SWP project operations and with the proposed operations of an Environmental Water Account.

4.6.3 ESTABLISHING PRIORITY FOR TRANSFERS IN A NEW CONVEYANCE FACILITY

Addresses: Section 3.5.2
Recommendation Type: Process

Discussion on this issue has been deferred, on the basis that the Preferred Program Alternative does not include an isolated cross-Delta conveyance facility. (See the *Revised Phase II Report* for more information on the Preferred Program Alternative.)

4.6.4 COSTS ASSOCIATED WITH CONVEYANCE OF TRANSFERRED WATER IN A STATE OR FEDERAL PROJECT FACILITY

Addresses: Section 3.5.3
Recommendation Type: Process

This issue is currently the subject of several draft bills pending before the State Legislature and being negotiated outside the CALFED process (SB 506, SB 1973, SB 2139, and AB 2498). If legislation is enacted which establishes new rules for cost allocations associated with wheeling transferred water, the new rules will be incorporated into the agencies' procedures. If the legislative effort does not resolve this issue, CALFED may facilitate further discussion among agencies and stakeholders in an effort to develop workable legislation, if still necessary.